

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of )  
PUBLIC UTILITIES COMMISSION )  
Instituting a Proceeding to Investigate the )  
Implementation of Feed-in Tariffs. )  
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DOCKET NO. 2008-0273

PUBLIC UTILITIES  
COMMISSION

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**ALEXANDER & BALDWIN, INC. through its division  
HAWAIIAN COMMERCIAL & SUGAR COMPANY'S  
OPENING STATEMENT OF POSITION AND  
APPENDIX A: PROPOSAL FOR FEED-IN TARIFF DESIGNS,  
POLICIES, AND PRICING METHODS**

**AND**

**CERTIFICATE OF SERVICE**

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COMMERCIAL & SUGAR COMPANY

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**ALEXANDER & BALDWIN, INC. through its division  
HAWAIIAN COMMERCIAL & SUGAR COMPANY'S  
OPENING STATEMENT OF POSITION**

TO THE HONORABLE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII:

Pursuant to the Hawaii Public Utilities Commission's (the "Commission") Order Approving the HECO Companies' Proposed Procedural Order, as Modified, ALEXANDER & BALDWIN, INC., through its division HAWAIIAN COMMERCIAL & SUGAR COMPANY, a Hawaii corporation ("HC&S") hereby submits to the Commission its Opening Statement of Position.

**Issue 1: What, if any, purpose do PBFiTs play in meeting Hawaii's clean energy and energy independence goals, giving Hawaii's existing renewable energy purchase requirements by the utilities?**

The Public Utilities Regulatory Act ("PURPA"), the renewable portfolio standard, net metering, and PBFits are distinct and independent initiatives that were designed and implemented to encourage the development of renewable energy and/or the efficient use of fossil fuels. These initiatives should be able to co-exist and complement each other. PBFits are beneficial for the development of renewable energy, as they provide predictability and certainty

with respect to the future prices to be paid for renewable energy.<sup>1</sup> The calculation of rates paid to renewable generations via PBFiT (i.e., cost plus a reasonable profit) will provide the predictable revenue stream to secure a reasonable return on investment, which, will assist existing and future renewable energy generators in meeting Hawaii's clean energy and energy independence goals.

**Issue 2: What are the potential benefits and adverse consequences of PBFiTs for the utilities, ratepayers, and the State of Hawaii?**

Since PBFiTs are based on the premise that the eligible renewable generator will be paid its cost plus a reasonable profit it should serve as an incentive for existing and future eligible renewable generators to do business in Hawaii and, thus, increase the amount of renewable energy being generated and used in Hawaii. It will also lower oil imports, increase energy security, and increase both jobs and the tax base for the state.<sup>2</sup>

The potential benefit of PBFiTs for the utilities is that they will be better able to meet their statutorily mandated Renewable Portfolio Standard and the goals laid out in their joint Hawaii Clean Energy Agreement with the State ("Energy Agreement"). Also, the potential abundance of renewable energy that will be made available, will allow the utilities to look at such technologies as battery storage and electrical vehicles in Hawaii. Currently, HC&S sees no potential adverse consequences to the utilities so long as the utilities keep an open mind and are open to all opportunities relating to the transmission and distribution of renewable energy and the new opportunities it will provide them with.

The potential benefit of PBFiTs for the ratepayers is a stronger local economy, as more of the dollars spent on energy consumption will be kept in Hawaii because less monies will be

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<sup>1</sup> See Hawaii Clean Energy Agreement at 16.

<sup>2</sup> Ibid.

devoted to purchasing imported oil presently being used by the utilities to generate electricity. As a result, Hawaii's economy will improve with the retention of capital and its multiplier effect should support job creation. On the other hand, as assumed in this Docket, PBFiTs could be higher than the utilities' avoided costs in order to encourage the development of renewable resource generation in Hawaii. Therefore, by definition the ratepayers will be paying more for electric energy under PBFiTs in the short-term to achieve the long-term goals such as the reduction of greenhouse gases and protection of Hawaii's pristine environment.

The potential benefit of PBFiTs for the State of Hawaii is that more capital will remain in the State, rather than being exported to purchase foreign oil. Also, PBFiTs may attract out-of-state investor dollars to Hawaii for renewable energy generation and a "green" tourism industry. PBFiTs will help to support the growth of the renewable energy industry in Hawaii, creating new jobs and increasing tax revenues, while at the same time improving the environment in Hawaii, due to the reduction in greenhouse gases and other environmentally damaging by-products caused by the burning of oil to produce electricity. A potential adverse impact is if the PBFiTs is designed and/or implemented incorrectly; for example, not being available to all proven technologies in the State of Hawaii, which may hurt Hawaii's existing and future renewable energy generation market.

**Issue No. 3: Why is or is not the PBFiT the superior methodology to meet Hawaii's clean energy and energy independence goals?**

See Response to Issue 1.

**Issue No. 4: What, if any modifications are prudent or necessary to existing federal or state laws, rules, regulations or other requirements to remove any barriers or to facilitate the implementation of a feed-in tariff not based on avoided costs?**

No modifications are prudent or necessary to existing federal laws, rules, or regulations to remove any barriers or to facilitate the implementation of feed-in tariff not based on avoided

costs. The United States Supreme Court has previously declined to overrule a decision by the New York Court of Appeals that upheld a New York State Law that required utilities to purchase power at a rate that exceeded avoided costs. See Consolidated Edison Co. of New York, Inc. v. Public Service Com'n of State, 63 N.Y. 2d 424, 483 N.Y.S. 2d 153 (1984), *appeal dismissed*, Consolidated Edison Co. of New York, Inc. v. Public Service Com'n of State, 470 U.S. 1075, 105 S.Ct. 1831 (1985) [Appeal dismissed for want of a substantial federal question]. Footnote 8 of the New York Court of Appeals decision recognized that:

FERC left the States free to utilize their own means of encouraging alternate energy production, stating: "The Commission has become aware that several States have enacted legislation requiring electric utilities in that State to purchase the electrical output of facilities . . . at rates which may differ from the rates required under the Commission's rules implementing section 210 of PURPA. "This Commission has set the rate for purchases at a level which it believes appropriate to encourage cogeneration and small power production, as required by section 210 of PURPA. While the rules prescribed under section 210 of PURPA are subject to the statutory parameters, the States are free, under their own authority, to enact laws or regulations providing for rates which would result in even greater encouragement of these technologies. However, State laws or regulations which would provide rates lower than the federal standards would fail to provide the requisite encouragement to these technologies, and must yield to federal Law. "If a State program were to provide that electric utilities must purchase power from certain types of facilities, among which are included 'qualifying facilities,' at a rate higher than that provided by these rules, a qualifying facility might seek to obtain the benefits of that State program. In such a case, however, the higher rates would be based on State authority to establish such rates, and not on the Commission rules. . . . "The Commission finds no inconsistency in a facility's taking advantage of section 210 in order to obtain one of its benefits, while relying on other authority under which to buy from or sell to a utility." (Preamble to FERC Rules, 45 Fed Reg 12214, 12221-12222.)

63 N.Y.2d at 437 [Emphasis added].

However, a modification to HRS § 269-27.2(c) may be prudent and/or necessary. HRS § 269-27.2(c) states, inter alia, "the [C]ommission shall establish that the rate for purchase of electricity by a public utility shall not be more than one hundred per cent of the cost avoided by

the utility when the utility purchases the electrical energy rather than producing the electrical energy.” [Emphasis added]. Such language may be interpreted as restricting the Commission from approving and adopting PBFiTs that exceed the utility’s avoided cost. It is HC&S’s understanding that there are at least two bills at the Legislature to amend HRS § 269-27.2(c) to eliminate said language.

**Issue No. 5: What evidence must the commission consider in establishing a feed-in tariff and has that evidence been presented in this investigation?**

The Commission should weigh and consider any and all types of evidence that it deems to be relevant and/or material in addressing the feed-in tariff pricing scheme being proposed or that should otherwise be established. Evidence should also be provided to demonstrate that the feed-in tariff pricing methodology ultimately established promotes, and does not unduly deter, the facilitation of renewables in the State of Hawaii, pursuant to HRS § 269-6(b) (which specifically allows the Commission to “consider the need for increased renewable energy use in exercising its authority and duties” under HRS Chapter 269). Finally, the Commission should consider evidence on whether the feed-in pricing methodology promotes the goals of the State of Hawaii (i.e., the Constitution of the State of Hawaii identifies increased agricultural self-sufficiency as being in the public interest. Thus, it is in the interest of the State to encourage the synergy between agricultural production and renewable energy production.).

Since the Commission’s investigation is still underway and there are many procedural steps remaining, HC&S cannot respond to whether such evidence has been presented in this investigation at this time.

**Issue No. 6: What role do other methodologies for the utility to acquire renewable energy play with and without a PBFiT, including but not limited to power purchase contracts, competitive bidding, avoided cost offering and net energy metering?**

See Response to Issue 1.

**Issue No. 7: What is the best design, including the cost basis, for PBFiTs or other alternative feed-in tariffs to accelerate and increase the development of Hawaii's renewable energy resources and their integration in the utility system?**

See HC&S's Proposal for Feed-in Tariff Design, Policies, and Pricing Methods attached as Appendix "A" to this Opening Statement of Position ("HC&S's Proposal"). HC&S's Proposal is based on a collaborative document with several other intervenors in this Docket. However, HC&S takes exception to portions of the collaborative document as follows<sup>3</sup>:

First, it is HC&S's position that the definition of "Biomass" should be:

"Biomass" means aquatic or terrestrial plant material, vegetation, or agricultural waste originating in the State of Hawaii, used as a fuel or energy source. Biomass also includes any other material when used on a supplemental basis.

Second, HC&S recommends that the definition of "Hybrid Facility" be changed to read as follows:

"Hybrid Facility" means a Renewable Energy Generating Facility that generates electricity from two or more Renewable Energy Sources, or from a Renewable Energy Source and another source used on a supplemental basis.

HC&S proposes these two amendments to the definitions because it uses coal as a supplemental fuel to its biomass and hydro power operations to meet its internal load and to provide Maui Electric Company, Limited ("MECO") with firm power, particularly during the off-season maintenance period when bagasse is not available.<sup>4</sup> The firm power that HC&S

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<sup>3</sup> These exceptions are shown as redlines to the HC&S Proposal that is attached as Appendix "A".

<sup>4</sup> The Hawaii Administrative Rules define "Biomass Fuel Burning Boilers" as fuel burning equipment in which the actual heat input of biomass fuel exceeds the actual heat input of fossil fuels, calculated on an

provides to MECO allows MECO to add more as-available renewable generation on to its system because it provides frequency regulation. Thus, if biomass facilities are not paid the FiT rate when it is burning coal, it should be compensated for providing frequency regulation to the grid.

Third, HC&S is recommending that the following new paragraph be added at the end of the Section entitled "Purchase of Renewable Energy Delivered by a Renewable Energy Generator to the Company":

The HECO utilities are encouraged to offer the FiT Schedule rates to existing renewable independent power producers ("IPP") in which Power Purchase Agreement are based on fossil fuel prices to renegotiate those contracts to delink their energy payment rates from oil costs and provide ratepayers with stable, long-term and predictably priced contracts.<sup>5</sup>

Finally, because of time constraints, HC&S and the several other intervenors did not have a chance to review and comment on HECO/CA's proposed FiT Schedule Agreement. Therefore, where the language of the HC&S proposal differs from the HECO/CA's proposed FiT Schedule Agreement, the HC&S proposal and this Opening Statement of Position will control.

**Issue 8: What renewable energy projects should be eligible for which renewable electricity purchase methods or individual tariffs and when?**

It is HC&S's position that if Feed-in tariffs are adopted by the Commission, existing IPPs with a PPA with the HECO Companies should immediately have the option to either maintain their current contract or be paid the FiT Schedule rates.

**Issue 9: What is the cost to consumers and others of the proposed feed-in tariffs?**

It is HC&S's understanding that the proposed feed-in tariffs will be higher than the utilities' avoided costs. Therefore, the consumer would be paying a premium for their energy

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annual basis. Hawaii Administrative Rules, Chapter 11-60.1.

<sup>5</sup> See Hawaii Clean Energy Agreement at 16.



consumption to encourage the laudable and recognized goal of clean energy and energy independence for Hawaii.

There is also the danger of a cost to the early entrants of PBFiTs and/or existing IPPs with PPAs of possible curtailment, should subsequent PBFiTs result in the instability and/or unreliability of a utility's power grid. To maintain the focus on Hawaii's clean energy and energy independence goals, those curtailed entities should be compensated for lost energy production at the rate of the PBFiT. Knowing that these producers of renewable energy will be compensated for lost production will expand the demand for entrants to this industry.

**Issue No. 10: Should the commission impose caps based upon these financial effects, technical limitations, or other reasons on the total amount purchased through any mechanism or tariff.**

HC&S does not support caps at this time because it may hinder the full potential of deployment of renewable energy in Hawaii.

**Issue No. 11: What process should the commission implement for evaluating, determining and updating renewable energy purchased power mechanisms or tariffs?**

The review period should be every two (2) years. The owners of the PBFiTs should be required to submit cost data of their respective projects to determine whether the stated tariff rates should be increased or decreased to cover all of the owners' cost. This information would be submitted to the Commission under protective order to maintain the confidentiality of the information being submitted. Thereafter, such information would be analyzed and the PBFiT would be adjusted accordingly.<sup>6</sup>

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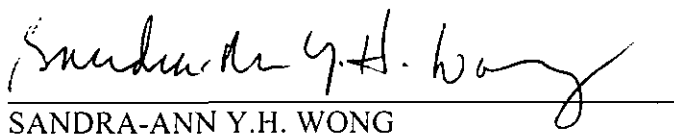
<sup>6</sup> HC&S supports the adjustment of the rates for renewable generators with existing contracts.

*Issue 12: What are the administrative impacts to the commission and the parties of the proposed approach?*

HC&S currently takes no position on this issue, but reserves its right to comment at a later date.

Respectfully submitted.

DATED: Honolulu, Hawaii, February 25, 2009.

  
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Hawaiian Commercial & Sugar Company

SCHEDULE FIT

Feed-in Tariff – Purchases from Renewable Energy Generating Facilities

Definitions:

For the purposes of this Schedule:

- (1) “Biogas” means a gaseous fuel produced by anaerobic decomposition of organic matter.
- (2) “Biomass” means aquatic or terrestrial plant material, vegetation, or agricultural waste, originating in the State of Hawaii, used as a fuel or energy source. It also includes any other material when used on a supplemental basis.
- (3) “Company” means Hawaiian Electric Company, Inc.
- (4) “Concentrating Solar Power Facility” means a Renewable Energy Generating Facility that generates electricity by concentrating Solar Radiation to heat a working fluid that drives a generator.
- (5) “Electrical Capacity” means the installed maximum potential alternating-current electricity generating capacity, in kilowatts, of a Renewable Energy Generating Facility.
- (6) “Hybrid Facility” means a Renewable Energy Generating Facility that generates electricity from two or more Renewable Energy Sources, or from a Renewable Energy Source and another source used on a supplemental basis.
- (7) “Hydropower” means the energy of moving water, including wave energy, ocean thermal energy conversion, and tidal energy.
- (8) “Non-Wood-Burning Generating Facility” means a Renewable Energy Generating Facility that generates electricity from Biomass and that is not a Wood-Burning Generating Facility.
- (9) “Offshore Wind Generating Facility” means a Wind Generating Facility that is located in an ocean water depth of at least 20 meters.
- (10) “Onshore Wind Generating Facility” means any Wind Generating Facility that is not an Offshore Wind Generating Facility.
- (11) “Photovoltaic Generating Facility” means a Renewable Energy Generating Facility that generates electricity from unconcentrated Solar Radiation.

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- (13) "Renewable Energy Generating Facility" means any identifiable facility, plant, installation, project, equipment, apparatus, or the like, located in the State of Hawaii, placed in service after the effective date of this Schedule, and that generates Renewable Energy from a Renewable Energy Source.
- (14) "Renewable Energy Generator" means any person that owns, controls, operates, manages, or uses a Renewable Energy Generating Facility to produce Renewable Energy from a Renewable Energy Source.
- (15) "Renewable Energy Source" means the following sources of energy:
  - (a) Biomass;
  - (b) Biogas;
  - (c) Geothermal Energy;
  - (d) Landfill Gas;
  - (e) Sewage Treatment Plant Gas;
  - (f) Hydropower;
  - (g) Solar Radiation;
  - (h) Wind.
- (16) "Wood-Burning Generating Facility" means a Renewable Energy Generating Facility that burns wood to generate electricity.
- (17) "Wind Generating Facility" means a Renewable Energy Generating Facility that generates electricity from Wind.

Interconnection

At the request of a Renewable Energy Generator that places a Renewable Energy Generating Facility in service, the Company shall interconnect such Renewable Energy Generating Facility to the electric system of the Company, provided that technical requirements set forth in the Company's Rules relating to interconnection of generating facilities with the Company's electric system, as approved by the Public Utilities Commission, are met. Costs incurred by the Company to meet technical requirements of interconnection shall be allocated so that those costs that benefit a Renewable Energy Generating Facility are borne by the Renewable Energy Generator that uses the Renewable Energy Generating Facility to produce Renewable Energy, in conformity with orders of the Public Utilities Commission relating to distributed generation in the State of Hawaii. Each of the Company and the Renewable Energy Generator shall disclose to the other, within 6 weeks of a request by the other, any and all data, relating to the electric system of the Company or the Renewable Energy Generating Facility of the Renewable Energy Generator, necessary to plan and execute such interconnection in conformity with such technical requirements.

A Renewable Energy Generating Facility shall be designed to operate in parallel with the Company's electric system without adversely affecting the operations of its customers and without presenting safety hazards to personnel of the Company or its customers. The Renewable Energy Generator shall furnish, install, operate and maintain facilities such as relays, switches, synchronizing equipment, monitoring equipment and control and protective devices designated by the Company and specified in the standard Schedule FIT Agreement ("Schedule FIT Agreement") as suitable for parallel operation with the electric system of the Company. The Renewable Energy Generating Facility and systems interconnecting the Renewable Energy Generating Facility with the Company's electric system must be in compliance with all applicable safety and performance standards of the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), and the Company's requirements for distributed generation interconnected with the Company's electric system as provided in the Company's Rules, and subject to any other requirements, including payments, as provided in the Schedule FIT Agreement.

Requests to interconnect a Renewable Energy Generating Facility in parallel with the Company's electric system will be processed in accordance with the procedures in Appendix II.

Schedule FIT Agreement:

The Company shall offer a Schedule FIT Agreement, in the form provided in Appendix I, to any Renewable Energy Generator that requests interconnection of a Renewable Energy Generating Facility to the electric system of the Company under this Schedule. Each such Schedule FIT Agreement shall oblige the Company to take all Renewable Energy generated by the Renewable Energy Generating Facility and made available to the electric system of the Company, and shall oblige the Company to purchase and pay for such Renewable Energy at the feed-in tariff rate of compensation (in cents per kilowatt-hour) set forth in this Schedule. The Company shall compensate the Renewable Energy Generator for such Renewable Energy in an amount no less than the number of kilowatt-hours of such Renewable Energy multiplied by such rate of compensation.

With respect to Renewable Energy generated by a Hybrid Facility and delivered to the electric system of the Company, each such Schedule FIT Agreement shall oblige the Company to take all such Renewable Energy, and shall oblige the Company to purchase and pay for such Renewable Energy generated by the Hybrid Facility from each Renewable Energy Source at the feed-in tariff rate of compensation (in cents per kilowatt-hour) for such Renewable Energy set forth in this Schedule.

Procedures for requesting and executing a Schedule FIT Agreement are provided in Appendix II to this Schedule.

Metering:

The Company, at its expense, shall install a meter to record the flow of Renewable Energy delivered to the electric system of the Company. The Renewable Energy Generator shall, at its expense, provide, install and maintain all conductors, service switches, fuses, meter sockets, meter instrument transformer housing and mountings, switchboard meter test buses, meter panels and similar devices required for service connection and meter installations on the premises of the Renewable Energy Generating Facility in accordance with the Company's Rules.

Any energy delivered to a Renewable Energy Generator by the Company will be metered separately from any Renewable Energy delivered by the Renewable Energy Generator to the Company, either by use of multiple meters or a meter capable of separately recording the net inflow and outflow of electricity.

Purchase of Renewable Energy Delivered by a Renewable Energy Generator to the Company:

The Company shall pay for each kilowatt-hour ("kWh") of Renewable Energy delivered to the Company by a Renewable Energy Generator as follows. The capacity limits stated below shall not limit or pertain to the gross output of the Renewable Energy Generating Facility.

Renewable Energy Source: Biomass	
Wood-Burning Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤150 kW	17.18
> 150 kW and ≤500 kW	13.51
> 500 kW and ≤5000 kW	12.18
> 5000 kW	11.45

Renewable Energy Source: Biomass	
Non-Wood-Burning Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤150 kW	28.00
> 150 kW and ≤500 kW	24.00
> 500 kW and ≤5000 kW	22.00
> 5000 kW	21.00

Renewable Energy Source: Biogas	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤150 kW	17.18

> 150 kW and ≤500 kW	13.51
> 500 kW and ≤5000 kW	12.18
> 5000 kW and ≤20000 kW	11.45

Renewable Energy Source: Geothermal Energy	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10000 kW	23.49
> 10000 kW	15.41

Renewable Energy Source: Landfill Gas or Sewage Treatment Plant Gas	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	13.21
> 500 kW and ≤5000 kW	9.10

Renewable Energy Source: Hydropower	
Renewable Energy Generating Facility Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	18.60
> 500 kW and ≤2000 kW	12.70
> 2000 kW and ≤5000 kW	11.23
> 5000 kW and ≤10000 kW	8.62
> 10000 kW and ≤20000 kW	7.93
> 20000 kW and ≤50000 kW	5.86
> 50000 kW	4.70

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Oahu Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	47.9
≥10 kW and ≤100 kW	43.6
≥100 kW and ≤500 kW	39.6
≥500 kW and ≤5000 kW	36.3
≥5000 kW	33.0

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Maui <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤10 kW	52.7
≥10 kW and ≤100 kW	47.9
≥100 kW and ≤500 kW	43.6
≥500 kW and ≤5000 kW	39.9
≥5000 kW	36.3

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Molokai <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤10 kW	57.5
≥10 kW and ≤100 kW	52.3
≥100 kW and ≤500 kW	47.5
≥500 kW and ≤5000 kW	43.6

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Lanai <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤10 kW	57.5
≥10 kW and ≤100 kW	52.3
≥100 kW and ≤500 kW	47.5
≥500 kW and ≤5000 kW	43.6

Renewable Energy Source: Solar Radiation	
Photovoltaic Generating Facility Located on Hawaii <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤10 kW	53.7
≥10 kW and ≤100 kW	48.8
≥100 kW and ≤500 kW	44.4
≥500 kW and ≤5000 kW	40.7
≥5000 kW	37.0



Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Oahu Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	33.0
> 500 kW and ≤5000 kW	28.0
> 5000 kW and ≤10000 kW	25.0
> 10000 kW and ≤20000 kW	22.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Maui Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	35.0
> 500 kW and ≤5000 kW	30.0
> 5000 kW and ≤10000 kW	27.0
> 10000 kW and ≤20000 kW	25.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Molokai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	38.0
> 500 kW and ≤5000 kW	33.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Lanai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	40.0
> 500 kW and ≤5000 kW	35.0

Renewable Energy Source: Solar Radiation	
Concentrating Solar Power Facility Located on Hawaii Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤500 kW	37.0
> 500 kW and ≤5000 kW	32.0
> 5000 kW and ≤10000 kW	29.0
> 10000 kW and ≤20000 kW	27.0

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Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Oahu Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	37.3
> 10 kW and ≤50 kW	31.9
> 50 kW and ≤250 kW	31.9
> 250 kW and ≤500 kW	31.9
> 500 kW and ≤1000 kW	30.6
> 1000 kW and ≤2500 kW	29.2
> 2500 kW and ≤5000 kW	27.9
> 5000 kW and ≤20000 kW	26.6

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Maui Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	40.3
> 10 kW and ≤50 kW	34.9
> 50 kW and ≤250 kW	34.9
> 250 kW and ≤500 kW	34.9
> 500 kW and ≤1000 kW	33.6
> 1000 kW and ≤2500 kW	32.2
> 2500 kW and ≤5000 kW	30.9
> 5000 kW and ≤20000 kW	29.6

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Molokai Electrical Capacity (kW)	Feed-in Tariff Rate (¢/kWh)
≤10 kW	43.3
> 10 kW and ≤50 kW	37.9
> 50 kW and ≤250 kW	37.9
> 250 kW and ≤500 kW	37.9
> 500 kW and ≤1000 kW	26.6
> 1000 kW and ≤2500 kW	35.2
> 2500 kW and ≤5000 kW	33.9
> 5000 kW and ≤20000 kW	32.6

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Lanai <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤ 10 kW	44.3
> 10 kW and ≤ 50 kW	38.9
> 50 kW and ≤ 250 kW	38.9
> 250 kW and ≤ 500 kW	38.9
> 500 kW and ≤ 1000 kW	37.6
> 1000 kW and ≤ 2500 kW	36.2
> 2500 kW and ≤ 5000 kW	34.9
> 5000 kW and ≤ 20000 kW	33.6

Renewable Energy Source: Wind	
Onshore Wind Generating Facility Located on Hawaii <u>Electrical Capacity (kW)</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
≤ 10 kW	40.3
> 10 kW and ≤ 50 kW	34.9
> 50 kW and ≤ 250 kW	34.9
> 250 kW and ≤ 500 kW	34.9
> 500 kW and ≤ 1000 kW	33.6
> 1000 kW and ≤ 2500 kW	32.2
> 2500 kW and ≤ 5000 kW	30.9
> 5000 kW and ≤ 20000 kW	29.6

Renewable Energy Source: Wind	
Offshore Wind Generating Facility <u>Years of Agreement Term</u>	<u>Feed-in Tariff Rate (¢/kWh)</u>
Years 1 through 12	22.02
Years 13 through 20	5.14

The Commission shall periodically adjust the Schedule FIT feed-in tariff rates of compensation in accordance with the procedures provided in Appendix III of this Schedule. The Renewable Energy Generator shall receive the feed-in tariff rate of compensation in effect at the time of execution of the Schedule FIT Agreement for the entire term of the Schedule FIT Agreement.

The HECO utilities are encouraged to offer the FiT Schedule rates to existing renewable independent power producers ("IPP") in which Power Purchase Agreement are based on fossil fuel prices to renegotiate those contracts to delink their energy payment rates from oil costs and provide ratepayers with stable, long-term and predictably priced contracts.

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HAWAIIAN ELECTRIC COMPANY, INC.

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<u>Renewable Energy Source</u>	<u>Term of Agreement</u>
Biomass	20 years
Biogas	20 years
Geothermal Energy	20 years
Landfill Gas	20 years
Sewage Treatment Plant Gas	20 years
Hydropower	20 years
Solar Radiation	20 years
Wind	20 years

#### Net Energy Metering

A Renewable Energy Generator that is eligible to enter into a net energy metering agreement with the Company shall have a choice of either (1) entering into a net energy metering agreement with the Company, or (2) entering into a Schedule FIT Agreement with the Company.

#### Penetration Limits for Intermittent Renewable Energy Sources

The obligations of the Company to interconnect a Renewable Energy Generating Facility to the Company's electric system and to offer an Schedule FIT Agreement to a Renewable Energy Generator to purchase and pay for Renewable Energy at a feed-in tariff rate of compensation under this Schedule shall not apply with respect to Renewable Electricity produced by a Renewable Energy Generating Facility that is (i) a Wind Generating Facility, and that is placed in service after December 31 of the year following the year during which the aggregate Electrical Capacity of Renewable Energy Generating Facilities that are Wind Generating Facilities as to which technical requirements for interconnection have been met equals or exceeds 25 per cent of the peak demand for such electrical system, provided that the Public Utilities Commission may increase, by rule or order, such aggregate Electrical Capacity limit above 25 per cent of such peak demand, or (ii) a Photovoltaic Generating Facility or a Concentrating Solar Generating Facility, and that is placed in service after December 31 of the year following the year during which the aggregate Electrical Capacity of Renewable Energy Generating Facilities that are Photovoltaic Generating Facilities or Concentrating Solar Generating Facilities as to which technical requirements for interconnection have been met equals or exceeds 50 per cent of the peak demand for such electrical system, provided that the Public Utilities Commission may increase, by rule or order, such aggregate Electrical Capacity limit above the above-referenced 25 per cent and 50 per cent peak demands.

#### Queuing Procedures:

Requests for interconnection of Renewable Energy Generating Facilities under this Schedule shall be administered on a first-ready, first-to-interconnect basis, modeled after the queuing procedures proposed by the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") and conditionally accepted by the Federal Energy

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Regulatory Commission. See 124 FERC ¶ 61,183, Midwest Independent Transmission System Operator, Inc., docket No. ER08-1169-000, Order Conditionally Accepting Tariff Revisions and Addressing Queue Reform, August 25, 2008.

Renewable Energy Certificates:

Any certificate, credit, allowance, green tag, or other transferable indicia or environmental attribute, verifying the generation of a particular quantity of energy from a Renewable Energy Source, indicating the generation of a specific quantity of Renewable Energy by a Renewable Energy Generating Facility, or indicating a Renewable Energy Generator's ownership of any environmental attribute associated with such generation, is the property of the Renewable Energy Generator and freely assignable by the Renewable Energy Generator.

CERTIFICATE OF SERVICE

The foregoing Document was served on the date of filing by hand delivery or electronically transmitted to each such Party.

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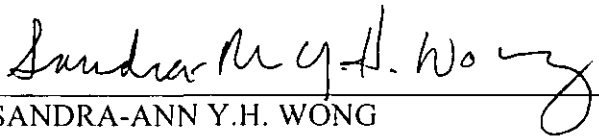
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